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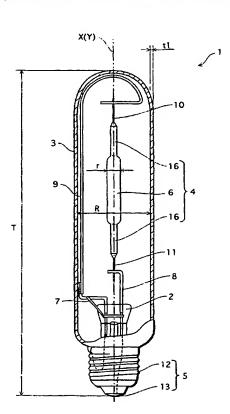
(71) Applicant (for all designated States except US): MAT-SUSHITA ELECTRIC INDUSTRIAL CO., LTD. [JP/JP]; 1006, Oaza Kadoma, Kadoma-shi, Osaka 5718501 (JP).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): KAKISAKA, Shunsuke. NOHARA, Hiroshi. UTSUBO, Atsushi. KANAZAWA, Yukiya.
- (74) Agents: NAKAJIMA, Shiro et al.; 6F, Yodogawa 5-Bankan, 2-1, Toyosaki 3-chome, Kita-ku, Osaka-shi, Osaka 5310072 (JP).
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(54) Title: METAL HALIDE LAMP AND LUMINAIRE



(57) Abstract: he present invention aims at providing a metal halide lamp having a configuration to achieve the following goals: to prevent the lamp from burning out during the life due to a rise in lamp voltage; and to obtain high luminous efficiency at the same time. The metal halide lamp 1 comprises: an arc tube 4 made of translucent ceramic and having a main tube part 6 in which a pair of electrodes 14 is disposed; and an outer tube 3 housing the arc tube 4 therein.  $4.0 \le L/D \le 10.0$ , where L (mm) is a length of a space between the electrodes 14 and D (mm) is an internal diameter of the main tube part 6.  $R/r \ge 3.4$ , where R (mm) is an internal diameter of the outer tube 3 and r (mm) is an external diameter in the main tube part 6 of the arc tube 4, within a region positionally corresponding to, in a radial direction of the outer tube and the arc tube, the space between the electrodes 14, on a cross-sectional surface where an outer circumference of the arc tube 4 comes closest to an inner circumference of the outer tube 3.  $M \le 4.0$ , where M (mg/cc)is a density of mercury enclosed in the arc tube 4.

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